EXHIBIT 159

REDACTED

Highly Confidential - Nitish Korula

1

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF TEXAS

SHERMAN DIVISION

- - -

THE STATE OF TEXAS, et al.,

            Plaintiffs,

v.   Civil Action No.

GOOGLE LLC,   4:20-cv-00957-SDJ

            Defendant.

- - -

April 19, 2024

- HIGHLY CONFIDENTIAL -

Remote videotaped deposition

of NITISH KORULA, conducted from the

location of the witness at Freshfields

Bruckhaus Deringer LLP, 170 Greenwich

Street, New York, New York, commencing at

9:00 a.m. EDT, on the above date, before

Marie Foley, a Registered Merit Reporter,

Certified Realtime Reporter and Notary

Public.

  Job No. MDLG6663184

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 2   understand that perhaps this ad is behind

 3   schedule, at risk of not meeting the

 4   commitment to serve a million ads in the

 5   month of April, and then there would be

 6   actions that they could take to make it

 7   more likely that that ad could serve.

 8   Or for another example, they

 9   could see hey, for this type of inventory,

10   this is how much money you typically make

11   in the auction. This is how much money

12   you actually made over the last one week

13   or two weeks.

14   Q.   Does a publisher have access to

15   all the same data that Google has access

16   to regarding any particular auction?

17   A.   Not necessarily.

18   Q.   Can you give me some examples of

19   information that Google would have that a

20   publisher would not?

21   A.   Mostly these are related to user

22   privacy where by and large we do provide

23   the information. What we might do is

24   remove identifying information for a

25   specific user.

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 2              So what does that mean?  Let's

 3    say the user visits a particular, you

 4    know, or, like, interacts with a

 5    particular publisher's app, right.

 6    There's a particular ad slot on that app.

 7    We run an auction.  We sell -- return an

 8    ad to that -- to that user's device, and

 9    then we do this for every user who comes

10    to the app.  The publisher might see for

11    this particular ad slot on this particular

12    app over this particular hour, say, over

13    this particular day, whatever it is, I ran

14    these many auctions; these were the

15    outcomes of the auctions; these were the

16    bids that they received for each of the

17    auctions.  But they might not know which

18    particular set of bids corresponded to

19    which particular user.

20         Q.    I think we're going to get into

21    this in -- in a moment, but is it the case

22    that the publisher sees every bid that was

23    submitted for a particular auction?

24         A.    This has varied over time.  What

25    you describe is currently the case.
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2   Q.   When was it not the case?

3   A.   Prior to 2019.   ████████

4 ███████████████████████████████████

5 ████████████████████████████████████

6 ██████████

7   Prior to 2019, before we

8   migrated to the unified first-price

9   auction, there was a data transfer file

10   that contains some of this information

11   that buyers could opt out of, and so some

12   buyers opted out of having their bids

13   included in the data that would go to

14   publishers. We made some changes to that

15   bid transfer file as part of a migration

16   to the unified first-price auction, and

17   then in the process of that, we removed

18   that offer.

19   Q.   What was the process for buyers

20   to opt out of inclusion in that file?

21   A.   I am sorry, I'm not aware of the

22   exact details for how they could opt out.

23   Q.   Do you know if many buyers chose

24   to opt out?

25   MR. MAHR: I'll object on scope.

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    2   But you can answer if you're

    3   able in your personal capacity.

    4   A.   I know at least a couple of

    5   buyers did, but I do not know how many.

    6   Q.   Who -- why did Google make a

    7   change to the, I'm sorry, was it the DAT

    8   file, is that what you called it?

    9   A.   Data transfer file.

   10   Q.   The data transfer file.

   11   Why did Google make a change to

   12   that data transfer file for unified

   13   first-price auctions?

   14   A.   Yeah, first of all, I should

   15   clarify that there was not one data

   16   transfer file, but many data transfer

   17   files.

   18   The specific file that is

   19   relevant here is the bid data transfer

   20   file which was the one that we changed at

   21   the time of the migration to unified

   22   first-price auction.

   23   We made several changes to the

   24   auction, right, and to, sort of like, how

   25   Google Ad Manager worked as a result of

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2   that migration, including a change from a

3   second-price auction to a first-price

4   auction.

5   As part of those changes, we

6   wanted to provide publishers more

7   visibility into the full set of bids that

8   they got, ████████████████████████████

9   ████████████████████████████████████

10   ██████████████████████████

11   ██   ███████████████████████

12   ████████████████████

13   MR. MAHR: I'll just caution the

14   witness not to reveal in his answer

15   any communications with counsel about

16   legal advice.

17   THE WITNESS: Thank you, Eric.

18   ██   ████████████████████████████

19   ████████████████████████████████████

20   ██████████████████████████████████████

21   ████████████████████

22   ██   ██████████████████████████████

23   ████████████████████████████████████

24   ██████████████████████████████████████

25   ████████████████████████

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2   A.   So, the changes that were made

3 involved removing the ability for buyers

4 to opt out of sharing their bids. So we

5 shared more bids.

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11   Q.   How did publishers react to

12 changes to that bid data transfer file?

13   A.   I think a few publishers

14 expressed some concerns, but I think the

15 vast majority of publishers did not.

16   MR. McBRIDE: If we could pull

17   up GOOG-DOJ-29427368.

18   (The above mentioned exhibit was

19   published.)

20   MR. McBRIDE: And if we could

21   skip to the first -- past the metadata

22   sheet.

23   (Exhibit 152, email chain ending

24   9/11/2019, Bates GOOG-AT-MDL-29427358-

25   374, was marked for identification, as

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 2            I don't -- I don't want this to
 3      delay us, but absolutely.
 4            Dr. Korula --
 5            MR. MAHR:  I was thinking the
 6      same thing.  And we'll try to do that.
 7            But we can proceed as we are
 8      now.  We want to go -- we want to move
 9      forward too.
10            MR. McBRIDE:  All right.
11      Terrific.
12 BY MR. McBRIDE:
13      Q.   All right.  Back -- back to this
14 paragraph.
15            Do you remember receiving this
16 email, Dr. Korula?
17      A.   I don't remember receiving this
18 specific email, but I do remember
19 participating in discussions on the
20 subject.
21
22
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24
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17   MR. MAHR: And to the extent --

18   in addition to cautioning you

19   concerning privileges you've already

20   identified yourself, I will also

21   object on scope to the extent this

22   involves communications outside

23   Google.

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████ ███████████████████████████████

████ █████████████████████

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12   Q.   Also in the parenthetical we

13   see -- well, maybe I'll just read -- read

14   the full sentence again: We had a call

15   with ██████████ yesterday, where they

16   reacted violently to the changes in the

17   Bid DT file - and then in parentheses -

18   where we're breaking joinability between

19   this file and the other DT files.

20   I want to unpack that a little

21   bit.

22   The bid DT file, that's the bid

23   data transfer file that we were discussing

24   a little bit earlier?

25   A.   It is.

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 1
 2        Q.      And this reference to "breaking
 3    joinability between this file and the
 4    other DT files," what is that referring
 5    to?
 6        A.      This refers to the information
 7    that would allow the -- the bids and other
 8    information in the bid data transfer file
 9    to be associated with specific events that
10    could be tied to individual users.
11    ███████████████████████
      ██████████████████████
      ██████████████████████████
      █████████████████████████
      █████████████████████████
      ████████████████████████████
      ███████████████████
18        Q.      How exactly did -- was the
19    joinability broken?
20        A.      ███████████████████
      █████████████████████████
      █████████████████████████
      ███████████████████████
      ███████████████
25        Q.      ████████████████████
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2 ████████████████

 █   █   ████████████████████

 █   █████████████████████████

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 █   ███████████████████████████

 █   ████████████████████████████

 █   ██████████████████████

9   Q.   ███████████████████████

 █   ██████████████████████████

 █   ██████████████████████

 █   █   ██████████████████

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 █   ████████████████████████

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 █   █████████

20   Q.   █████████████████████

 █   ███████████████████████████████

 █   ████████████████████████████

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 █   █   █████

 █   █   █████████████████

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 1
 2                    C E R T I F I C A T E
 3              I, MARIE FOLEY, Registered Merit
 4    Reporter, Certified Realtime Reporter, and
 5    Notary Public for the State of New York,
 6    do hereby certify that prior to the
 7    commencement of the examination, NITISH
 8    KORULA, was duly remotely sworn by me to
 9    testify to the truth, the whole truth and
10    nothing but the truth.
11        I DO FURTHER CERTIFY that the foregoing
12    is a verbatim transcript of the testimony
13    as taken stenographically by me at the time,
14    place and on the date hereinbefore set forth,
15    to the best of my ability.
16        I DO FURTHER CERTIFY that I am neither
17    a relative nor employee nor attorney nor
18    counsel of any of the parties to this action,
19    and that I am neither a relative nor employee
20    of such attorney or counsel, and that I am
21    not financially interested in the action.
22
23    COURT REPORTER
      Registered Merit Reporter
24    Certified Realtime Reporter
      Notary Public
25    Dated: May 24, 2024
```

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ERRATA SHEET FOR THE TRANSCRIPT OF:

Case Name: *The State of Texas, et al. v. Google LLC*, No. 4:20-cv-00957-SDJ (E.D. Tex.)

Deposition Date: April 19, 2024

Deponent: Nitish Korula

CORRECTIONS

Page	Line	Change	Reason
13	12	"available through" should be "available to"	Transcription Error
15	14	"when sellside were reported" should be "when sellside engineers were onboarded"	Transcription Error
19	7	"and I worked" should be "when I worked"	Transcription Error
21	7	"app request" should be "ad request"	Transcription Error
23	4-5	"sellside competence and buyside competence" should be "sellside components and buyside components"	Transcription Error
23	9	"sellside competence" should be "sellside components"	Transcription Error
24	6-7	"sellside competence and buyside competence" should be "sellside components and buyside components"	Transcription Error
24	14-15	"just only want to direct sale" should be "just only want direct sales"	Transcription Error
29	4	"the elements" should be "there are elements"	Transcription Error
29	5	"The elements" should be "There are elements"	Transcription Error
30	21	"buy the auction" should be "buy via the auction"	Clarification
31	9	"it's opportunity" should be "there's opportunity"	Transcription Error
31	23	"any" should be "many"	Transcription Error
35	18	"offer" should be "option"	Transcription Error
41	9	"given" should be "evidently"	Transcription Error
48	20	"'cause" should be "because"	Transcription Error
57	23	"ad-type product" should be "ad tech product"	Transcription Error
57	23-24	"That ad-type product" should be "That ad tech product"	Transcription Error
58	10	"control" should be "fill"	Transcription Error
58	22	"aggregate" should be "aggregator"	Transcription Error
59	7	"The trade desk" should be "The Trade Desk"	Transcription Error
61	21-22	"so they there" should be "so there"	Transcription Error
62	20	"we made" should be "relaying"	Transcription Error

Page	Line	Change	Reason
63	21	"shouldn't" should be "should"	Transcription Error
67	19	"this is best" should be "this is to the best"	Transcription Error
71	10	"the DFP" should be "DFP"	Transcription Error
77	21	"IME SDK" should be "IMA SDK"	Transcription Error
78	12	"GMS" should be "GMA"	Transcription Error
79	22	"publisher's configurations of the" should be "publisher's configurations, of the"	Transcription Error
83	23	"awarded" should "rewarded"	Transcription Error
83	24	"adm" should be "ad, or"	Transcription Error
84	12	"CCP" should be "CCPA"	Transcription Error
86	19	"integrate" should be "update"	Transcription Error
88	24	"that" should be "there's"	Transcription Error
90	11	"dated" should be "stated"	Transcription Error
91	2-3	"that, sort of, multiple mixer" should be "that, sort of, worked with multiple mixers"	Transcription Error
98	25	"send PSI request" should be "send PSI a request"	Transcription Error
100	13	"in month" should be "in the month"	Transcription Error
104	13	"project" should be "logic"	Transcription Error
106	10	"hear" should be "heard"	Transcription Error
111	5-6	"publisher's revenue" should be "publishers' revenue"	Transcription Error
112	3	"caused" should be "calls"	Transcription Error
114	6	"brand in which" should be "brand which"	Clarification
115	8	"prices" should be "pricing"	Transcription Error
121	8	"'cause" should be "because"	Transcription Error
122	9	"Slavonia" should be "Slovenia"	Transcription Error
122	12	"want many" should be "have many"	Transcription Error
122	15-16	"I'm not interested in loading down my servers" should be "just unnecessarily load down my servers"	Transcription Error
123	4	"bids requests" should be "bid requests"	Transcription Error
123	16	"note" should be "not"	Transcription Error
124	21-22	"but I can explain at a high level" should be "but at a very very high level"	Transcription Error
125	4	"mil" should be "mille"	Transcription Error
125	17	"advertisers" should be "advertiser"	Transcription Error
125	9	"sort of, they're capping" should be "so they're capping"	Transcription Error

Page	Line	Change	Reason
125	9	"capping this configured" should be "having this configured"	Clarification
129	15	"malare" should be "malware"	Transcription Error
130	20	"malare" should be "malware"	Transcription Error
130	23	"malare" should be "malware"	Transcription Error
131	14	"ruling" should be "rolling"	Transcription Error
131	16	"ruled" should be "rolled"	Transcription Error
132	2	"affect" should be "effect"	Transcription Error
136	17	"such is" should be "such as"	Transcription Error
139	5-8	"and they'll say somebody willing to pay a million dollars and somebody says yes and then somebody willing to pay, you know, 1.1 million dollars and so forth" should be "and they'll say 'Is somebody willing to pay a million dollars?' and somebody says 'Yes,' and then 'Is somebody willing to pay, you know, 1.1 million dollars?' and so forth"	Transcription Error
140	10-15	"a very high price, is anybody willing to pay me, you know, a hundred dollars for something that might be worth 10 or 20 and maybe nobody says they want to pay a hundred bucks, and then they say is anybody willing to pay me $95 or $90." should be "a very high price, 'Is anybody willing to pay me, you know, a hundred dollars?' for something that might be worth 10 or 20, and maybe nobody says they want to pay a hundred bucks, and then they say, 'Is anybody willing to pay me $95 or $90?'"	Transcription Error
141	14	"auction is to" should be "auction, is to"	Transcription Error
141	19	"alternate strategy" should be "dominant strategy"	Transcription Error
143	3	"think of buyer's goal" should be "think a buyer's goal"	Transcription Error
143	13	"repeated gain" should be "repeated game"	Transcription Error
152	23	"demands sources" should be "demand sources"	Transcription Error
153	4	"full" should be "floor"	Transcription Error
154	3	"high-low" should be "higher"	Transcription Error
156	6	"server floor" should be "serving flow"	Transcription Error
157	3	"what happens" should be "will happen"	Transcription Error
157	21-24	██████████████████████	Transcription Error
158	5	"contain the content" should be "convey the content"	Transcription Error
172	18	"were ran" should be "ran"	Transcription Error
172	20-21	"all experiments that were ran on Google Ad Manager" should be "all experiments on Google Ad Manager"	Transcription Error

Page	Line	Change	Reason
173	16	"codes" should be "code"	Transcription Error
173	16-17	"might want run that as an experiment" should be "might roll that out as an experiment"	Transcription Error
175	3-4	"not specific particular" should be "not specifically"	Transcription Error
175	11-12	"certainly not specific to" should be "certainly not on"	Transcription Error
175	13	"presumably covered all in display ads" should be "presumably covering all of display ads"	Transcription Error
180	4	"aware" should be "not aware"	Transcription Error
180	20	"got" should be "run"	Transcription Error
181	11	"frequent" should be "treatment"	Transcription Error
181	12-13	"traffic like in any experiment" should be "traffic. Like an A/B experiment"	Transcription Error
181	22	"randomized" should be "random noise"	Transcription Error
187	8	"affect" should be "effect"	Transcription Error
187	9	"affect" should be "effect"	Transcription Error
189	24	"used up the same" should be "used the same"	Transcription Error
190	5	"still either" should be "still see either"	Transcription Error
191	20	"two different polls, he actually saw" should be "two different polls, I actually saw"	Transcription Error
195	5	"you wouldn't expect" should be "you would expect"	Transcription Error
200	22-23	"an experiment. That is purely an experiment" should be "an experiment that is purely an experiment"	Transcription Error
201	16	"pay" should be "bid"	Transcription Error
201	16-17	"is meant to illustrated how the correct worked" should be "was meant to illustrate how the product worked"	Transcription Error
203	22	"experiment to configuration" should be "experiment configuration"	Transcription Error
203	25	"you look at it one percent" should be "you look good at one percent"	Transcription Error
204	2-3	"you look at it two percent" should be "you look good at two percent"	Transcription Error
207	19	"more" should be "less"	Clarification
210	17	"'cause" should be "because"	Transcription Error
212	23	"working on." should be "working on it."	Transcription Error
214	17	"directors" should be "direct"	Transcription Error
216	7	"'cause" should be "because"	Transcription Error
219	4	"large rate" should be "large intermediary"	Transcription Error
225	5	"charged its advertiser's fee" should be "charged its advertisers a fee"	Transcription Error
226	8	"revenue per mil" should be "revenue per mille"	Transcription Error

Page	Line	Change	Reason
237	16	"decreasing floors" should be "increasing floors"	Transcription Error
241	13-14	"0.1 per – 17 percent" should be "0.17 percent"	Clarification
250	23	"understand it has Enhanced DRS" should be "understand Enhanced DRS"	Transcription Error
252	22	"per-option" should be "per-auction"	Transcription Error
257	7	"ruled" should be "rolled"	Transcription Error
257	8	"weren't" should be "were"	Transcription Error
260	17	"very more" should be "very many more"	Transcription Error
262	18	"purist" should be "spurious"	Transcription Error
262	24	"one of them" should be "some of them"	Clarification
268	21	"code" should be "account"	Transcription Error
274	2	"it's in" should be "sort of"	Transcription Error
277	18	"that always" should be "that it's always"	Transcription Error
279	24-25	"which as" should be "versus"	Transcription Error
282	17	"considerate" should be "considered"	Transcription Error
287	16-17	"keep meeting this title?" should be "keep making this better?"	Transcription Error
301	15	"an" should be "and"	Transcription Error
304	13	"conflict" should be "conflate"	Transcription Error
309	6	"want opt in" should be "want to opt in"	Transcription Error
309	9-10	"Affected DRS didn't affect any other optimization" should be "It affected DRS. It didn't affect any other optimization"	Transcription Error
313	7	"repeat myself before" should be "repeat what I said before"	Transcription Error
313	25	"And then on the a subsequent" should be "And then on a subsequent"	Transcription Error
315	12	"a net benefit" should be "a permanent net benefit"	Transcription Error
325	7	"Your more" should be "More"	Clarification
326	20	"observation" should be "simulations"	Transcription Error
327	6	"kind of, factually" should be "counterfactually"	Transcription Error
329	20	"codes" should be "goals"	Transcription Error
330	6	"codes" should be "goals"	Transcription Error
331	12	"codes" should be "goals"	Transcription Error
339	12	"second" should be "seconds"	Transcription Error
339	17	"as the" should be "the"	Transcription Error
339	23	"Noel Worth [ph]" should be "Noam Wolf"	Transcription Error
340	2	████████████████████	Clarification

Page	Line	Change	Reason
340	3	████████████████████████████	Clarification
344	9	"main query is" should be "many queries"	Transcription Error

I have inspected and read my deposition and have listed all changes and corrections above, along with my reasons therefor.

Date: 05/22/2024   Signature: Nilesh Komla